

FIG.2

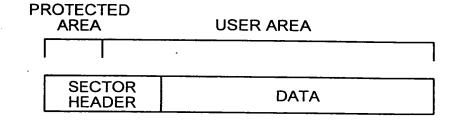


FIG.3

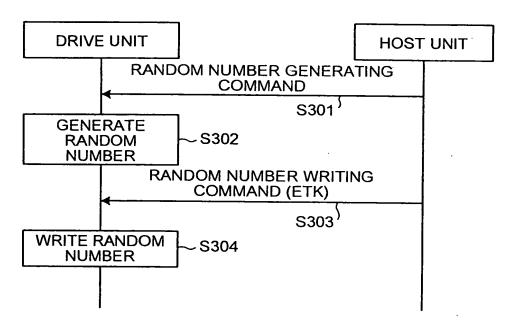
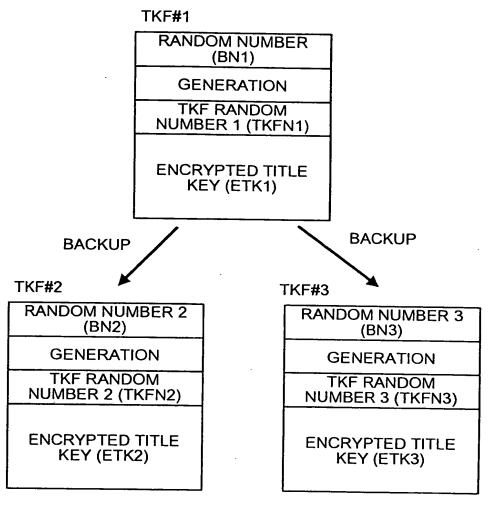


FIG.4A

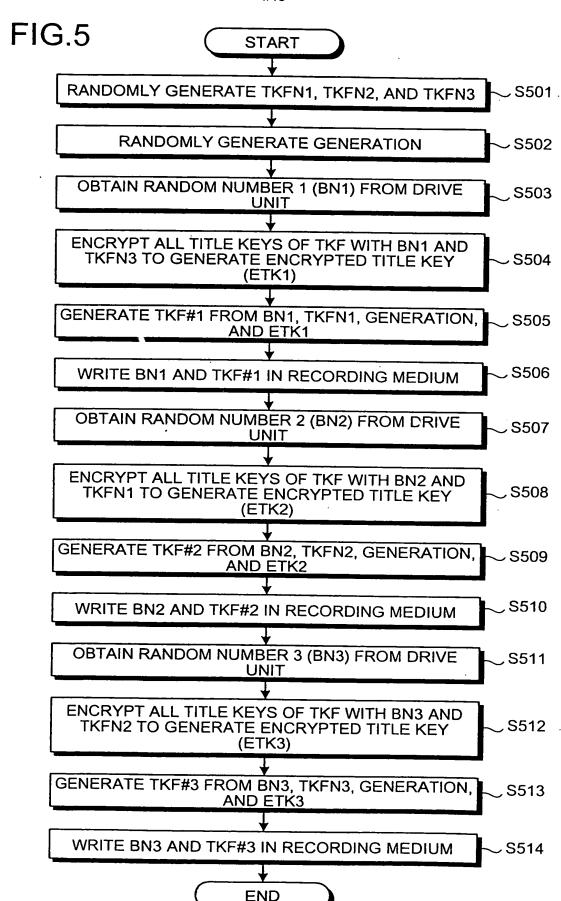


ETK1 = f (TK, BN1, TKFN3) ETK2 = f (TK, BN2, TKFN1) ETK3 = f (TK, BN3, TKFN2)

FIG.4B

ETK1 TO ETK3

EIRTIOLIKS
ENCRYPTED TITLE KEY 1
ENCRYPTED TITLE KEY 2
ENCRYPTED TITLE KEY 3
:
ENCRYPTED TITLE KEY n



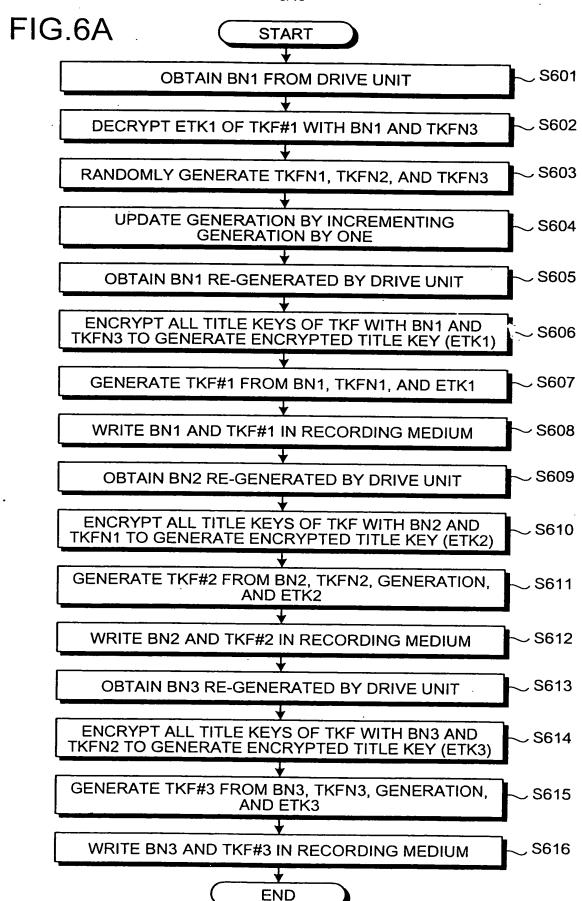


FIG.6B

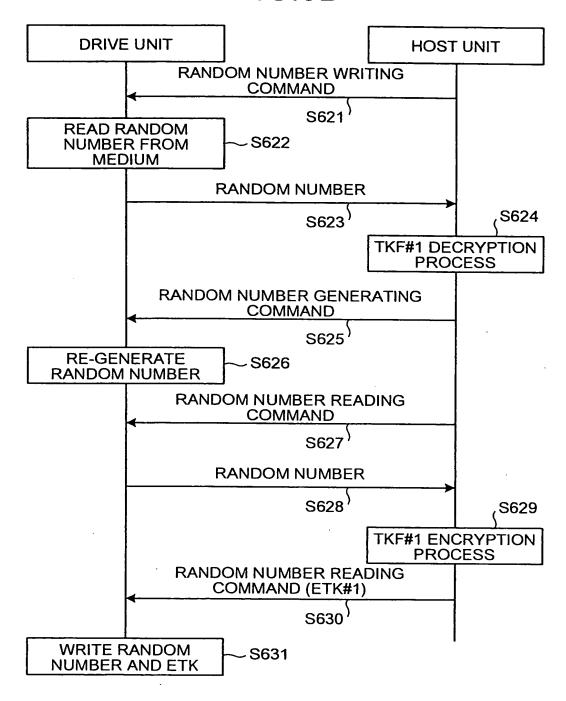
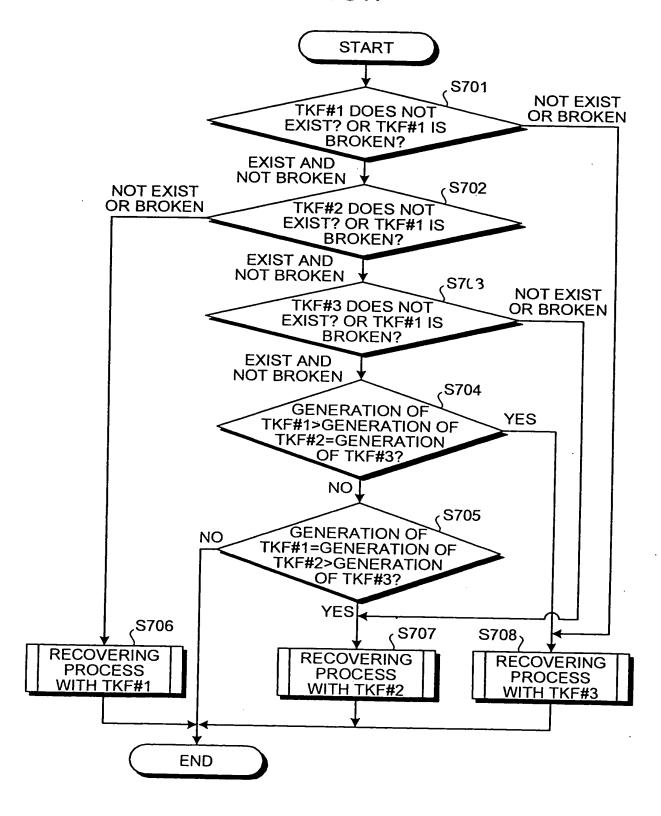
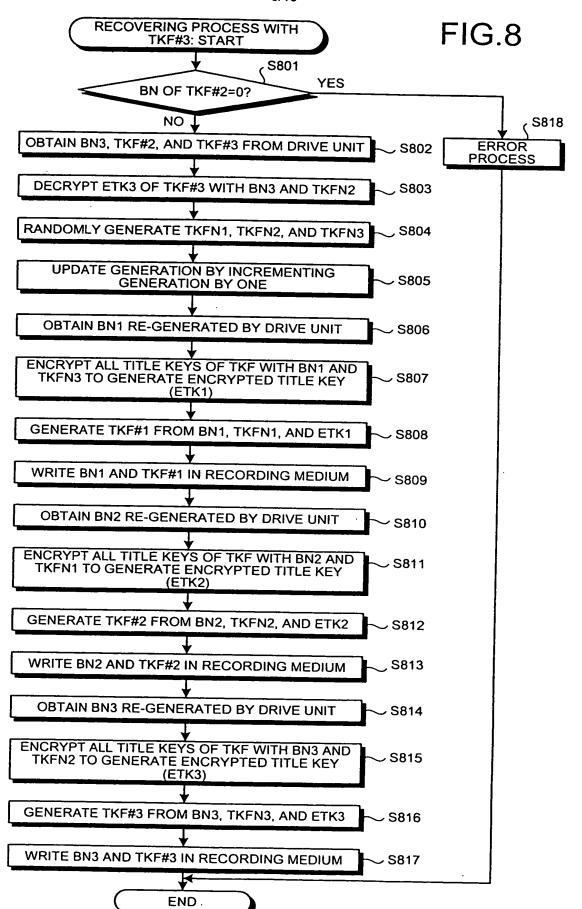
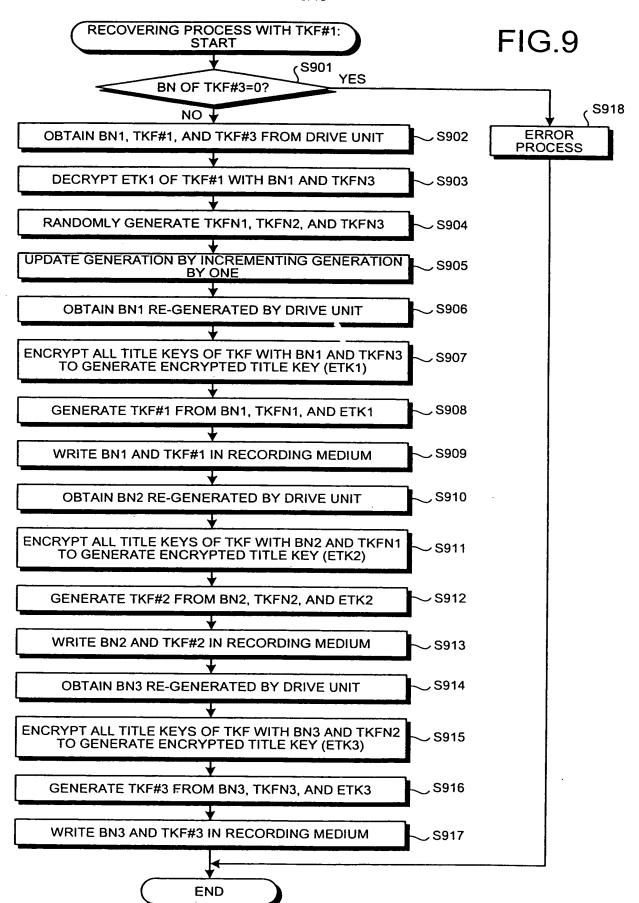


FIG.7







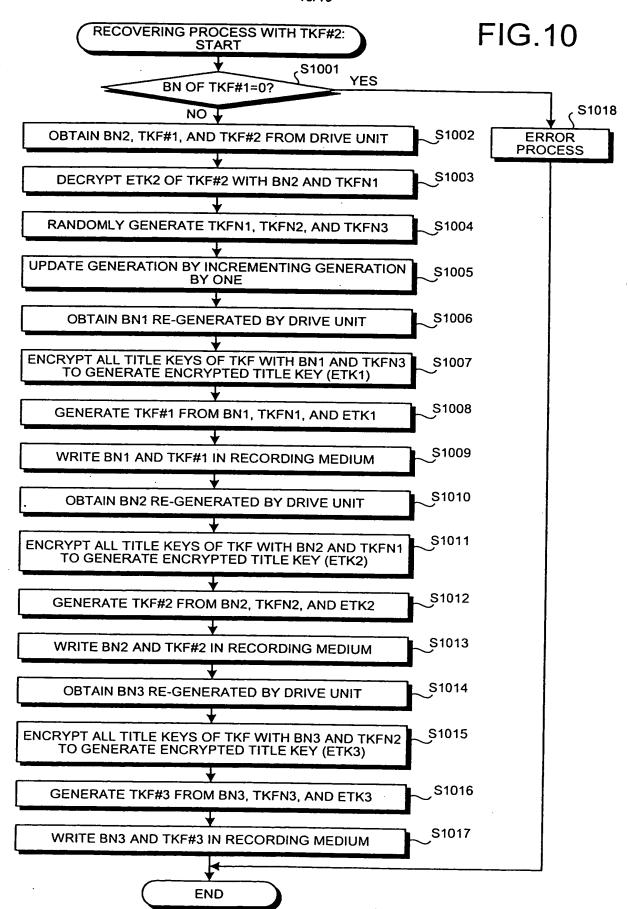


FIG.11

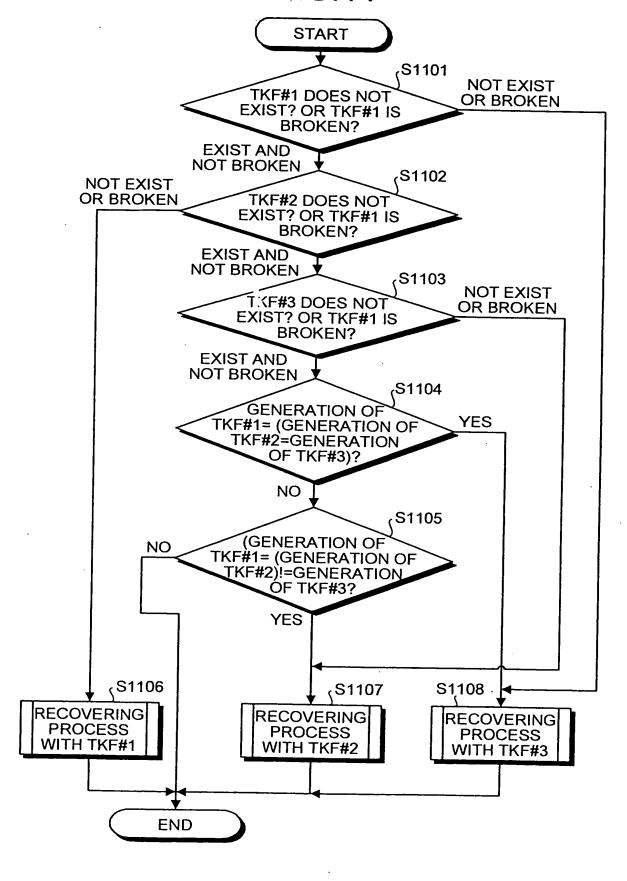
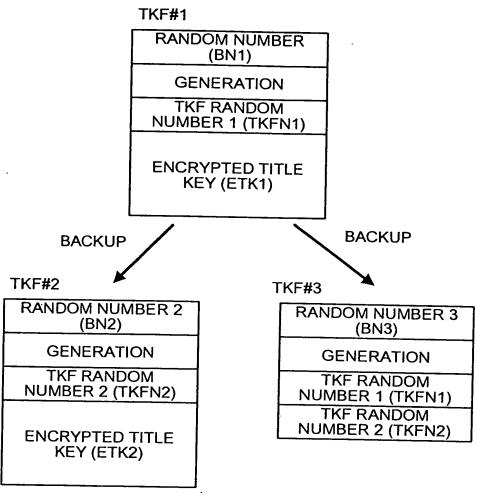


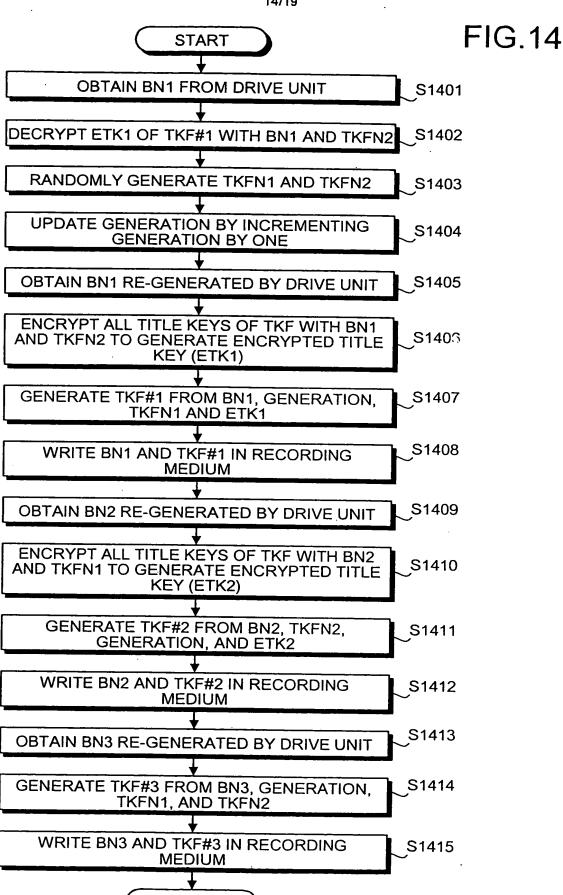
FIG.12



ETK1 = f (TK, BN1, TKFN2) ETK2 = f (TK, BN2, TKFN1)

FIG.13

START S1301 RANDOMLY GENERATE TKFN1 AND TKFN2 S1302 RANDOMLY GENERATE GENERATION **OBTAIN RANDOM NUMBER 1 (BN1) FROM** S1303 **DRIVE UNIT ENCRYPT ALL TITLE KEYS OF TKF WITH BN1** S1304 AND TKFN2 TO GENERATE ENCRYPTED TITLE KEY (ETK1) GENERATE TKF#1 FROM BN1, TKFN1, S1305 GENERATION, AND ETK1 WRITE BN1 AND TKF#1 IN RECORDING S1306 MEDIUM **OBTAIN RANDOM NUMBER 2 (BN2) FROM** S1307 **DRIVE UNIT** ENCRYPT ALL TITLE KEYS OF TKF WITH BN2 S1308 AND TKFN1 TO GENERATE ENCRYPTED TITLE KEY (ETK2) GENERATE TKF#2 FROM BN2, TKFN2, S1309 GENERATION, AND ETK2 WRITE BN2 AND TKF#2 IN RECORDING S1310 MEDIUM **OBTAIN RANDOM NUMBER 3 (BN3) FROM** S1311 **DRIVE UNIT** GENERATE TKF#3 FROM BN3, GENERATION, S1312 TKFN1, AND TKFN2 WRITE BN3 AND TKF#3 IN RECORDING S1313 **MEDIUM END**



END

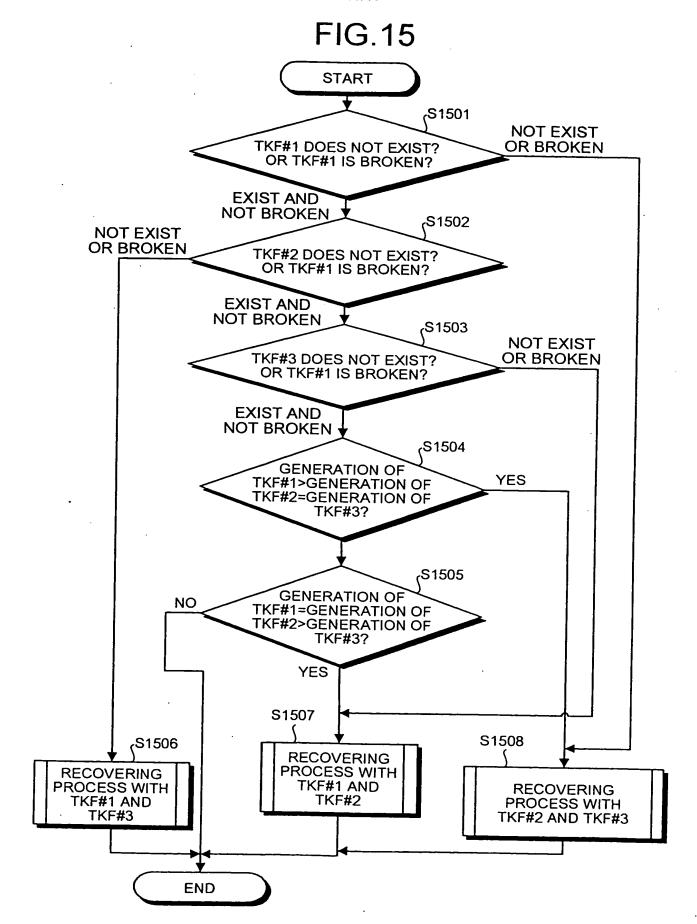


FIG.16

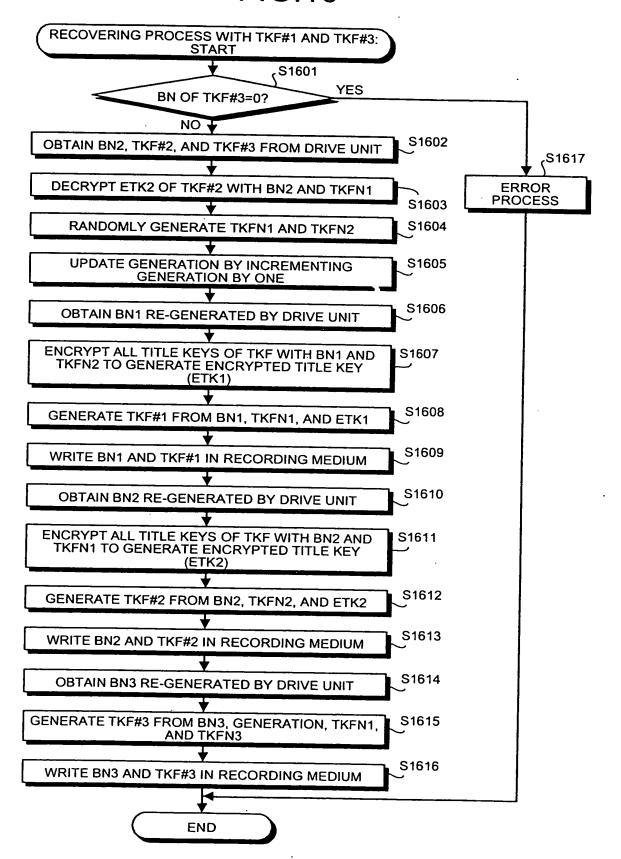


FIG.17

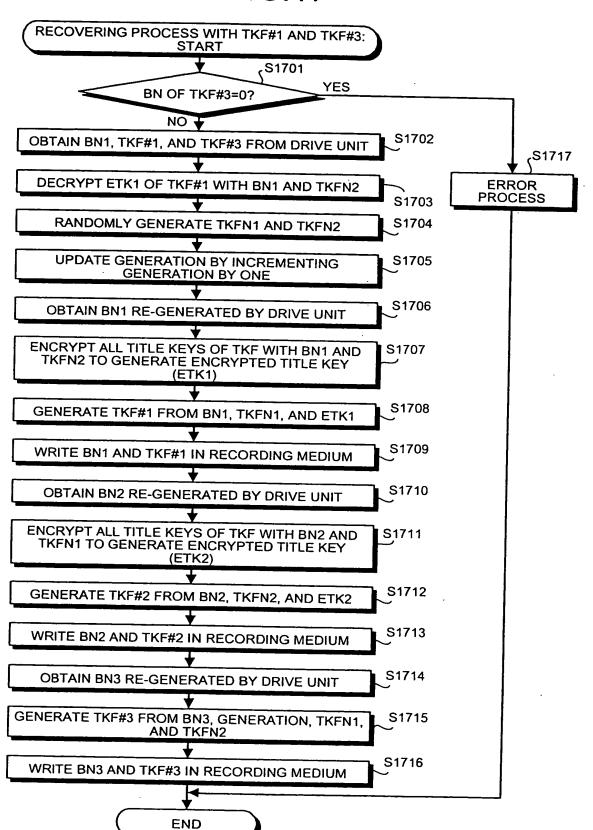
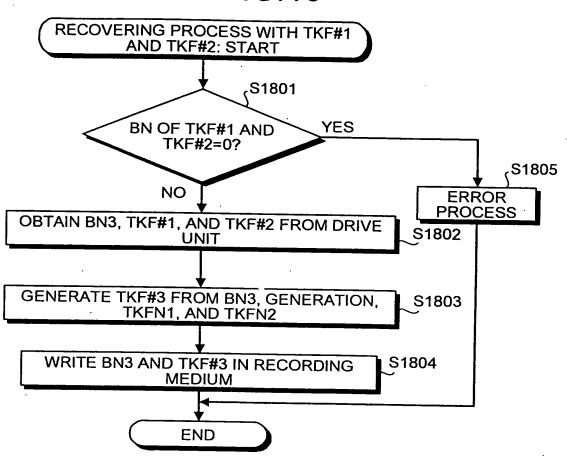
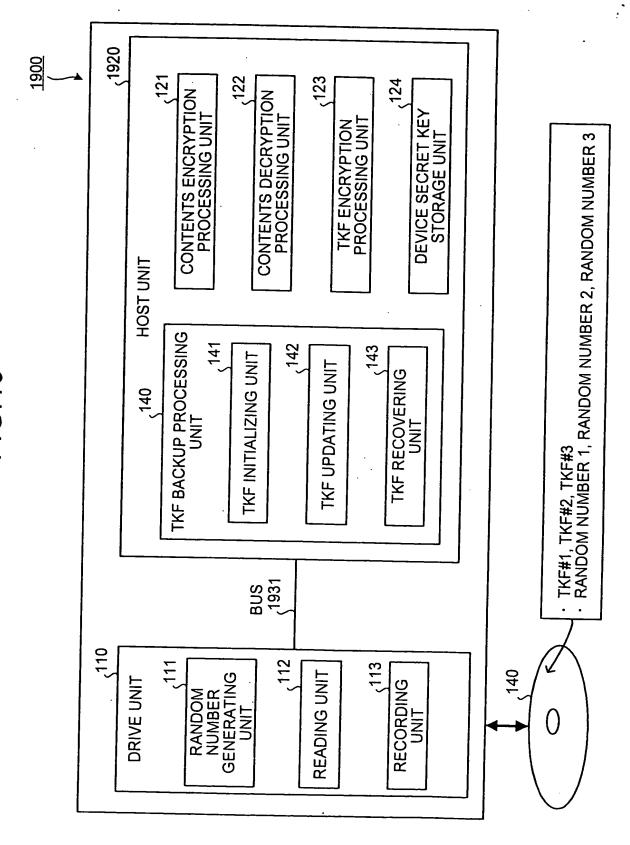


FIG.18





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